

In the Claims:

Claims 1-25 (Cancelled)

26. (Currently amended) An apparatus, comprising:

a correction circuit coupled to receive a first symbol transmitted from a first antenna at a one time and a complement of a conjugate of a second symbol transmitted from a second antenna at the one time, and coupled to receive a first the second symbol transmitted from a the first antenna at a first another time and a conjugate of a second the first symbol transmitted from a the second antenna at the first another time, the correction circuit producing a first symbol estimate in response to the first symbol and the conjugate of the ~~second~~ first symbol; and

a combining circuit coupled to receive a plurality of symbol estimates including the first symbol estimate, the plurality of symbol estimates corresponding to a respective plurality of signal paths, the combining circuit producing a first symbol signal in response to the plurality of symbol estimates.

27. (Cancelled)

28. (Currently amended) An apparatus as in claim ~~27~~ 26, wherein the correction circuit produces ~~the first symbol estimate and a second symbol estimate in response to the first symbol, the conjugate of the second symbol, the second symbol, and the complement of the conjugate of the first symbol~~ second symbol and the complement of the conjugate of the second symbol.

29. (Currently amended) An apparatus as in claim 28, wherein the correction circuit is further coupled to receive a first estimate signal and a second estimate signal and wherein the correction circuit produces the first symbol estimate and the second symbol estimate in response to the first symbol, the conjugate of the ~~second~~ first symbol, the second symbol, the complement of the conjugate of the ~~first~~ second symbol, the first estimate signal, and the second estimate signal.

30. (Currently amended) An apparatus as in claim 26, wherein the correction circuit receives the first symbol and the complement of the conjugate of the second symbol via a common receive antenna.

31. (Currently amended) An apparatus as in claim 26, wherein the correction circuit receives the first symbol and the complement of the conjugate of the second symbol over a common frequency band.

32. (Previously added) An apparatus as in claim 26, wherein the plurality of symbol estimates corresponds to one of the first and second symbols.

33. (Previously added) An apparatus as in claim 26, wherein the combining circuit is a rake combiner.

34. (Previously added) An apparatus as in claim 26, wherein said first antenna and said second antenna are transmitting antennas.

35. (Currently amended) An apparatus as in claim 26, wherein said correction circuit is coupled to an antenna that receives said first symbol transmitted from said first antenna and said complement of said conjugate of said second symbol transmitted from said second antenna.

36. (Currently amended) A method, comprising the steps of:
receiving a first symbol transmitted from a first antenna at a one time and a complement of a conjugate of a second symbol transmitted from a second antenna at the one time;

receiving a first the second symbol transmitted from a the first antenna at a first another time and a conjugate of a second the first symbol transmitted from a the second antenna at the first another time;

producing a first symbol estimate in response to the first symbol and the conjugate of the second first symbol;

receiving a plurality of symbol estimates including the first symbol estimate, the plurality of symbol estimates corresponding to a respective plurality of signal paths; and
producing a first symbol signal in response to the plurality of symbol estimates.

37. (Cancelled)

38. (Currently amended) The method of claim 36, further including producing a second symbol estimate in response to the ~~first symbol, the conjugate of the second symbol, the second symbol, and a complement of the conjugate of the first symbol~~ second symbol and the complement of the conjugate of the second symbol.

39. (Currently amended) The method of claim 36, further including receiving a first estimate signal and a second estimate signal and wherein the correction circuit produces the first symbol estimate and the second symbol estimate in response to the first symbol, the conjugate of the ~~second~~ first symbol, the second symbol, the complement of the conjugate of the ~~first~~ second symbol, the first estimate signal, and the second estimate signal.

40. (Currently amended) The method of claim 36, further including receiving the first symbol and the complement of the conjugate of the second symbol over a common channel.

41. (Currently amended) The method of claim 36, wherein the first symbol and the complement of the conjugate of the second symbol are received over a common frequency band.

42. (Previously added) The method of claim 36, wherein the plurality of symbol estimates corresponds to one of the first and second symbols.

43. (Currently amended) The method of claim 36, wherein the steps of receiving a first symbol transmitted from a first antenna at a ~~first~~ one time and a complement of the conjugate of a second symbol transmitted from a second antenna at the ~~first~~ one time, and said producing a first

symbol estimate in response to the first symbol and the conjugate of the ~~second~~ first symbol, occur is in a correction circuit.

44. (Previously added) The method of claim 36, wherein the steps of receiving a plurality of symbol estimates including the first symbol estimate, the plurality of symbol estimates corresponding to a respective plurality of signal paths, and producing a first symbol signal in response to the plurality of symbol estimates, occur in a combining circuit.

45. (Previously added) The method of claim 44, wherein the combining circuit is a rake combiner.